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REVIEW SUB-COMMITTEE

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(+ Annexes I to III)

O. Eng.

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COMPREHENSIVE REVIEW OF THE EXPLANATORY NOTES

POSSIBLE AMENDMENT OF THE EXPLANATORY NOTES

TO HEADINGS 84.30 TO 84.40

(Item C.2 on Agenda)

Reference documents :

NR0302E1 (RSC/26)
NR0303E1 (RSC/26)

NR0332E2 – Annex E/12 (RSC/26 - Report)

I. BACKGROUND

1. At its 23rd Session (March 2001), the Review Sub-Committee discussed the issue of the comprehensive review of the HS Explanatory Notes, taking into account the points raised by the Secretariat in Doc. NR0150E1, in particular the scope of the updating of the existing Explanatory Notes, by :
 - deleting references to obsolete products and technology,
 - substituting references to current products and technology,
 - restructuring the Notes to make them easier to understand, and
 - supplementing the Notes to make them more complete.
2. In accordance with these discussions, amendments to the Explanatory Notes to headings 84.30 to 84.40 were prepared as a joint proposal by the Secretariat and an officer of the Swedish Administration.

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3. At its 26th Session, the Review Sub-Committee carried out a preliminary examination of the proposed amendments and agreed to continue the discussion at its next session.

II. SECRETARIAT COMMENTS

4. The present document is a revised version of relevant parts of Doc. NR0302E1 and Doc. NR0303E1 prepared by the Secretariat for the 26th Session of the Review Sub-Committee.

5. With a view to facilitating the discussion, the Secretariat has set up three annexes to the present document :

- In Annex I the usual presentation of the proposed amendments and new texts is used (i.e., “delete and substitute” format).
- In Annex II a presentation involving strikethrough and underlining is used : the proposed deletions are indicated by “strikethrough” text, whereas new texts are indicated by underlining. Texts that were merely renumbered or relettered have not been included.
- In Annex III the comments on the suggested changes made by delegates at the Sub-Committees 26th Session are reproduced.

6. The **Swedish** “Explanatory Memorandum” and the Secretariat’s own comments (in bold) are reproduced below.

Explanatory comments for each heading

Heading 84.30.

7. The Explanatory Note was aligned on the numerical order of the subheadings.

Heading 84.33

8. There is a typing error concerning the exclusions on page 1479. The Committee agreed, at its 29th Session (see the reference under heading 84.69 of this document), that a similar error could be corrected in the next Amending Supplement. The Secretariat will be preparing a document for the next HSC meeting containing any additional errors it has found of a “substantial” nature and this correction will be included in that document.

Heading 84.34

9. A description of milking robots is added (Part (I)). In addition, Part (II), item (B) is deleted. Dairy industry experts say that UV light can transform cholesterol into vitamin D; however, to their knowledge, UV irradiators are not used in dairies and should therefore be deleted.
10. In industrial production churns are rotated by motor power and the barrel is made of stainless steel, it was therefore recommended to amend the text accordingly (Part (III), item (A) (1). Butter-workers are not used in modern dairies and should therefore be deleted (Part (III),

item (A) (2). It was indicated, however, that there exist machines for working butter that was previously frozen and stocked. As the experts could not confirm whether these machines were marketed or whether they were referred to as “re-workers”, nothing was recommended with respect to the ENs. The description of combined churns and workers was updated (Part (III), item (A) (3)).

Heading 84.36

11. Industry experts believed that germination appliances cannot be considered as appliances for preparing fodder. Consequently, germination appliances are relettered from Part (I), Item (E) (8) to item (IJ).
12. Incubators and hatchers are marketed as two different categories of poultry-keeping machines. Consequently, it is suggested that a new item (B) be inserted to provide for hatchers. According to a Swedish veterinarian, poultry pluckers cannot be considered as poultry-keeping machines. Moreover, the automatic poultry pluckers of heading 84.36 are very rare (probably 0,1 % of all poultry pluckers). As a result, it would appear reasonable to delete them on the understanding that they belong under heading 84.38. A new item (F) was added to provide for sexing and vaccination equipment. The manufacturer of this equipment (Pas Reformer Hatchery Technologies, The Netherlands) consider it as a poultry-keeping machine. Although the equipment is fitted with canulas, the manufacturer does not regard it as an instrument used in veterinary sciences. As this opinion was also shared by a Swedish expert, a text was prepared for this new item under heading 84.36. According to the Dutch manufacturer (see above), it would appear that chick counting and boxing systems are important in international trade. Moreover, these machines are considered to be handling machines and, therefore, an exclusion paragraph was added to the Explanatory Note to heading 84.36.
13. **Given the statement in the previous paragraph concerning the “automatic poultry pluckers” being classifiable in heading 84.38, the Secretariat wonders whether the deletion should be followed by an inclusion in that heading or, considering the rareness of the product, it should not be mentioned at all in the Explanatory Notes.**

Heading 84.39

14. The last sentence in paragraph (I) (E), referring to drive motors, is added to make clear that there exist two groups of refiners (cf. item (I) (A) (7)). Obsolete items were deleted. Modern Fourdrinier wires are made of textile material (confirmed by a Swedish manufacturer of such articles), the question therefore is whether the exclusion of Fourdrinier wires of copper or bronze (heading 74.14) should be deleted (insignificant trade). Fourdrinier wires made of copper or bronze are no longer a typical example of the products covered by heading 74.14 (confirmed by a Swedish manufacturer of cloth made of copper wire), consequently, the second paragraph of Explanatory Note to heading 74.14 should be amended.
15. **The Secretariat would note that the term "reeling" is used extensively in the Explanatory Notes in the textile area. Moreover, it is named in the text of heading 84.45. Given this situation, the Secretariat wonders about the appropriateness of substituting the term "reeling machines" with "winders and rewinders". However, if the Sub-Committee agrees with this amendment, then the Secretariat wonders whether, for**

consistency, a similar substitution should be made in Part (II), Item (A), in the last sentence where "reeling devices" are listed.

16. The Secretariat has added, for the Sub-Committee's examination, the following additional deletions :
- Exclusion Page 1497, (a), "esparto grass" and
 - Second paragraph of the "PARTS" Section, "Toothed cylinders for esparto grass openers".

III. CONCLUSION

17. The Sub-Committee is invited to examine the draft amendments to the Explanatory Notes to headings 84.30 to 84.40, as set out in the Annexes to this document, while take into account the comments made by delegates at its last session, as reproduced in Annex III.

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AMENDMENTS TO THE EXPLANATORY NOTES
TO BE MADE BY CORRIGENDUM

CHAPTER 84.

Pages 1469 to 1471. Heading 84.30.

1. Parts (I), (II), (IV) and (V).

Renumber present parts (I), (II), (IV) and (V) as (V), (IV), (I) and (II), respectively, and move the text of these parts accordingly.

2. Part (III).

Reletter present items (A), (B), (C), (D), (E), (F) and (G) as (C), (F), (A), (G), (B), (D) and (E), respectively, and move the text of these items accordingly.

Page 1479. Heading 84.33. Exclusion paragraph. Second exclusion (e).

Reletter present second exclusion (e) as (f).

Page 1480. Heading 84.34.

1. Part (I). Third paragraph. New text.

Insert the following new text after the last sentence :

“These types include milking robots, also known as voluntary milking systems. These systems, which incorporate all the equipment necessary for automatic milking, *inter alia*, a nimble robotic arm, electronic devices, a vacuum pump, a compressor, a washing machine, milk meters, etc., are designed for milking cows at their own initiative. Each cow wears a collar carrying a transponder that identifies it, so the system can decide whether the animal is due to be milked. The milking is performed by a robotic arm fitted with a laser-assisted vision system that permits the milk extraction devices to be guided directly to the teats of the cow.”

2. Part (II). First paragraph.

Delete and substitute :

“This group includes **homogenisers**. These break up the fat into fine particles which are more readily digestible, and which also remain longer in a state of emulsion without the formation of cream.”

Page 1481. Heading 84.34. Part (III).

1. Items (A) (1) to (A) (3).

Delete and substitute :

“(1) **Churns** usually consist of a barrel of stainless steel, inside which are a number of partitions or blades. The barrel or the blades are rotated by motor power and the resultant beating action hardens the cream to foam and gradually converts it into butter.

(2) **Combined churns and workers.** These machines, which are used for continuous production of butter, consist essentially of electric motors that drive cylinders with fast rotating elements which transform the cream into butter. The butter is pressed through the working elements of the machine as a continuous length.”

Renumber present item (A) (4) as (A) (3).

2. Item (B) (2).

Insert “hard, semi-hard and” after “**Machines for moulding**”.

3. Item (B) (3).

Delete “(e.g., of the screw, counterweight, etc., types)” and substitute “(e.g., of the mechanical, pneumatic, etc., types)”.

Page 1484. Heading 84.36. Part (I). Item (E) (8).

Reletter present item (E) (8) as (IJ) and move the text of this item accordingly.

Page 1485. Heading 84.36. Part (II).

1. Item (A).

Delete and substitute :

“(A) **Incubators.** These machines are fitted with devices permitting eggs, placed in trays, to be automatically turned in an atmosphere where temperature, air flow and air humidity conditions can be exactly controlled. They may work in conjunction with a control system which may be linked to a personal computer in order to optimise the incubation result. Some incubators, known as combi incubators, incorporate hatcher functions.”

2. New item (B).

Insert the following new item (B) :

“(B) **Hatchers**. In these machines, which incorporate devices for controlled heating and air circulation, the eggs are placed in baskets or special trays for hatching.”

3. Present item (B).

Delete and substitute :

“(B) **Brooders**, larger appliances with heating and cooling devices, used for rearing young chicks.”

4. Item (E).

Delete present item (E).

Reletter present items (B), (C) and (D) as (C), (D) and (E), respectively.

5. New item (F).

Insert the following new item (F) :

“(F) **Sexing and vaccination equipment**, enabling hatcheries to separate chicks of different sex and to vaccinate them. These machines are not designed to be used by veterinary surgeons.”

6. New exclusion paragraph.

Insert the following new exclusion paragraph after item (F) :

“The heading **does not include** machines, known as chick counting and boxing systems, for automatically counting and placing chicks in boxes (**heading 84.28**); the handling of the chicks is the primary function, the counting being merely a secondary function permitting to place in a box a fixed number of chicks, predetermined in accordance with the size of the box.”

Page 1495. Heading 84.39. First paragraph.

1. First sentence.

Delete “(wood, esparto grass, straw, rags, old rope, waste paper, etc.)” and substitute “(wood, straw, bagasse, waste paper, etc.)”.

2. Second sentence.

Delete “(esparto, rags, waste paper, etc.)” and substitute “(straw, bagasse, waste paper, etc.)”.

Pages 1495 to 1496. Heading 84.39. Part (I). Item (A).

1. Items (1) to (3).

Delete present items (1) to (3).

2. Item (5).

Delete “**esparto grass**” and substitute “**straw**”.

3. Item (9).

Delete ““**Masonite**” **defibrators**” and substitute “**Defibrators** for making pulp for “**Masonite**”, ”.

Renumber present items (4) to (9) as (1) to (6), respectively.

4. New item (7).

Insert the following new item (7) :

“(7) **Refiners** for making mechanical pulp and chemi-mechanical pulp, in which wood chips or partly refined chips are reduced to fibres by subjecting the material to mechanical treatment in-between two discs where one or both discs are rotating.”

Page 1496. Heading 84.39. Part (I).

1. Item (D).

Delete present item (D).

2. Item (E).

Delete and substitute :

“(E) **Refiners**. These are usually of two types: conical and disc refiners. The purpose is to prepare the pulp for papermaking by improving the paper making properties of the pulp. These refiners are driven by motors which are much less powerful than those used for the refiners described under A (7) above.”

Reletter present items (E) and (F) as (D) and (E), respectively.

Pages 1496 to 1497. Heading 84.39. Part (II).

1. Item (A).

Delete and substitute :

“(A) **Machines for forming the stock into continuous sheets of paper or paperboard (e.g., Fourdrinier machines or twin wire machines).** These are very complex machines. They consist of regulators for feeding the stock to the head box, a slice at the output end of the head box for distributing the stock on to the wire, an endless band of fine wire cloth, usually a woven fabric of synthetic monofilaments, supported on a breast roll or a forming roll, foils, table rolls, shake mechanism, suction boxes, dandy rolls for watermarking, couch rolls for increasing the dry solids content and consolidating the paper, press rolls forming at least one press nip, one press roll may include a press shoe and a surrounding, rotatable belt loop, in which nip the paper is pressed against one or between two endless felt belts or other process belts, drying rolls, steam boxes, etc., and usually also calender rolls and reeling devices, etc.”

2. Item (B). Title.

Delete “**Board machines** (normally used for the manufacture of paperboard) and **mould machines**” and substitute “**Vat machines**”.

3. Item (B). Second sentence.

Delete “strip” and substitute “web”.

4. Item (B). Last sentence.

Delete present last sentence.

5. Item (C).

Delete and substitute :

“(C) **Machines for the manufacture of multi-layered paper, board or paperboard.** These machines consist of different combinations of Fourdrinier formers or twin wire formers. The different web layers are produced simultaneously and are joined in a humid state in the machine, as a rule without a binder.”

6. Item (D). Title.

Delete “**Small machinery for making paper**” and substitute “**Sample drawing apparatus for making paper**”.

Page 1497. Heading 84.39.

1. Part (III). Item (A).

Delete "**Reeling machines**" and substitute "**Winders and rewinders**".

2. Part (III). Item (B).

Delete "size, gum, varnish, enamel, metal powder, wax, etc" and substitute "inorganic or organic pigment layers, size, gum, silicon, wax, etc".

3. Part (III). Item (D).

Delete present item (D).

4. Part (III). Item (F).

Delete and substitute :

"(F) **Crêping machines**. These normally consist of a metal scraper or doctor which scrapes the paper from a heated cylinder, so that crinkling of the paper occurs. However, creping usually is carried out in the papermaking machine."

5. Part (III). Item (IJ).

Delete "often" and substitute "may be".

Reletter present items (E) to (IJ) as (D) to (H), respectively.

6. Exclusion paragraph. Exclusion (a).

Delete "for rags, esparto grass, straw, etc." and substitute "for rags, straw, etc."

Page 1498. Heading 84.39. PARTS.

1. Second paragraph.

Delete and substitute :

"Backfalls; bedplates and beater bars for beaters; couch rolls; suction boxes; wire mesh cylinders for vat machines; dandy rolls."

2. Exclusion paragraph. Exclusion (a).

Delete and substitute :

“(a) Endless wire belts for Fourdrinier machines and twin wire machines, and felt roller covers (**heading 59.11**).”

3. Exclusion paragraph. Exclusion (c).

Delete present exclusion (c).

Reletter present exclusions (d) to (f) as (c) to (e), respectively.

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AMENDMENTS TO THE EXPLANATORY NOTES

TO BE MADE BY CORRIGENDUM

CHAPTER 84.

Pages 1469 to 1471. Heading 84.30. Parts (I) to (V).

The heading includes :

(IV) PILE-DRIVERS AND PILE-EXTRACTORS

Pile-drivers consist of a heavy hammer weight, usually operated in a tall vertical guiding framework. The weight is raised by mechanical power and then allowed to fall on to the head of the pile either under gravity (single-acting machines) or under power (double-acting hammers).

The heading also covers pile-extractors.

(IV) SNOW-PLOUGHS AND SNOW-BLOWERS

Snow-ploughs and snow-blower vehicles of section XVII with built-in equipment are **excluded**. The heading, however, covers snow-ploughs designed to be pushed or pulled (blade types), e.g., those designed to be attached to lorries or tractors.

(III) EXTRACTING, CUTTING OR DRILLING MACHINERY

This is mainly used in mining, well-drilling, tunnelling, quarrying, clay cutting, etc.

(A) Coal or rock cutters for cutting or breaking down coal, ores, etc. They consist of a bar or disc fitted with picks, or, more often, of an endless cutting chain running round a metal jib which may be adjustable for level and angle of cut (universal cutters). They may be mounted on self-propelled wheeled or tracklaying chassis, and some (cutter loaders) may be very large, incorporating a number of cutting chains and a built-in conveyor for loading the cut material on to the face conveyor, tubs, etc.

(B) Tunnelling machinery. Tunnelling shields have smooth outer surfaces and sharp front cutting edges which are pushed forward into the soil by a hydraulic jacking system.

(C) Machines for boring drill holes in rock, coal, etc., and percussion type cutters in which the drill can be swung to make linear cuts. But the heading **excludes** such tools for working in the hand, pneumatic, hydraulic or with self-contained motor (**heading 84.67**).

(D) Well sinking or boring machines for the extraction of petroleum, natural gases, sulphur (Frasch process), etc., for raising strata samples in mining and oil well prospecting, for the sinking of artesian wells, etc. These machines are of two main types :

- (1) **Rotary well sinking machinery** consisting essentially of a derrick fitted with pulley tackle, a hoist drum with transmission and control gear (draw-work), a swivel and a rotary table or gear-wheel.

The power-driven draw-work imparts a rotary movement to the drill pipes by means of the rotary table or gear-wheel, the drill pipes being suspended from the rotary swivel. The draw-work also raises and lowers the drill pipes, when required, by means of the pulley tackle.

- (2) **Percussion machines** consisting of an eccentric-driven rocker beam, the see-saw action of which causes the bit to strike continually into the well floor.

It should be noted that this heading covers **only** drilling machines as such. Other quite distinct machines normally used therewith are **excluded** even if presented with the drilling machines, e.g., pumps and compressors to force mud, stone, etc., out of the drilling (**heading 84.13 or 84.14**).

Fixed platforms used for the discovery or exploitation of off-shore deposits of oil or natural gas are also classified here. Floating or submersible platforms fall in **heading 89.05**.

- (EG) **Augering machines**, hand or power operated, for boring holes in the ground (e.g., for setting trees or fencing posts), but **not including** hand tools of **Chapter 82**.

- (EB) **Hydraulic wedges** consist of a long barrel with a number of pistons set laterally at intervals along the length. They are placed in a fissure or drill hole and the pistons are forced out by pumping water into the barrel, thus breaking down the rock or coal.

- (GD) **Ploughs, strippers, etc.**, consist of cutter blades, ploughs, picks, wedges, etc., which are forced along the face, slicing off the coal, clay, etc., and loading it directly on to face conveyors, etc.

(IV4) **TAMPING OR COMPACTING MACHINES**

This group includes :

- (A) **Road rollers designed to be pushed or towed**. This group includes “sheep’s-foot” tamping rollers studded with metal feet which press into the soil, and tamping rollers made up of a series of lorry type wheels with heavy grade pneumatic tyres mounted on a common axle.

However, the heading **excludes** self-propelled road rollers, whether or not fitted with “sheep’s-feet” or with solid or pneumatic tyres (**heading 84.29**) and agricultural rollers (**heading 84.32**).

- (B) **Tamping machines** as used in road making, for packing rail-road ballast, etc., not self-propelled. Tools for working in the hand, pneumatic, hydraulic or with self-contained motor, are, however, **excluded** (**heading 84.67**).

- (C) **Machines, usually pneumatic, for compacting the sides of embankments, etc.**

(V4) **EARTH EXCAVATING, SCRAPING OR LEVELLING MACHINERY**

This group includes :

- (A) **Digging or excavating machines** described in Explanatory Note to heading 84.29, not self-propelled.

- (B) **Dredgers** (bucket or shovel type), similar to the multibucket excavators of heading 84.29.

Floating dredgers are **excluded** (**heading 89.05**).

- (C) **Railroad ballast excavator-screening machines**, consisting essentially of a continuous chain of buckets which dig the ballast from under the railway tracks. They also incorporate mechanisms for screening and discharging the ballast. But see paragraph (a) at the beginning of this Explanatory Note regarding machines mounted on vehicles of Chapter 86.

- (D) **Rippers, rooters and scarifiers** fitted with cutting teeth which loosen the top soil, break up old road surfaces, etc., prior to re-laying.
- (E) **Skimmers**, a type of excavating shovel similar to those of heading 84.29 with a horizontal boom; used for “skimming” off the top soil.

Page 1479. Heading 84.33. Exclusion paragraph. Second exclusion (e).

(fe) Tobacco leaf stripping or cutting machines (**heading 84.78**).

Page 1480. Heading 84.34.

1. Part (I). Third paragraph.

In the machines of larger capacity, the various components are usually separate. A variable number of milking pails may be connected to the vacuum pump unit by piping. Certain types have no milk pails, the milk passing directly from the teat-cups to the cooling apparatus or storage tanks along a pipe-line, generally fixed. These types include milking robots, also known as voluntary milking systems. These systems, which incorporate all the equipment necessary for automatic milking, *inter alia*, a nimble robotic arm, electronic devices, a vacuum pump, a compressor, a washing machine, milk meters, etc., are designed for milking cows at their own initiative. Each cow wears a collar carrying a transponder that identifies it, so the system can decide whether the animal is due to be milked. The milking is performed by a robotic arm fitted with a laser-assisted vision system that permits the milk extraction devices to be guided directly to the teats of the cow.

2. Part (II). First paragraph.

The heading includes :-

- (A) This group includes **Hhomogenisers**. These break up the fat into fine particles which are more readily digestible, and which also remain longer in a state of emulsion without the formation of cream.
- (B) **Irradiators** in which ultra-violet lamps are used to increase the vitamin D content of the milk.

Page 1481. Heading 84.34. Part (III).

1. Items (A) (1) to (A) (3).

- (1) **Churns** usually consist of a ~~wooden~~ barrel of stainless steel, inside which are a number of partitions or blades. The barrel or the blades are ~~re*ated,~~ rotated by hand or motor power, and the resultant beating action hardens the cream ~~a*d~~ to foam and gradually converts it into butter.
- (2) ~~**Butter workers** are used to press out the moisture from the freshly churned butter. They consist of a fixed or revolving table on which the butter is rolled and kneaded by cylinders, usually of wood.~~
- (23) In **cCombined churns and workers**, the barrel is fitted with grooved rollers instead of partitions, so that the two operations described above can be performed simultaneously. These machines, which are used for continuous production of butter, consist essentially of electric motors that drive cylinders with fast rotating

elements which transform the cream into butter. The butter is pressed through the working elements of the machine as a continuous length.

2. Items (B) (2) to (B) (3).

- (1) **Machines for moulding** hard, semi-hard and soft or cream cheeses, but **not including** machines which also wrap or weigh the product (**headings 84.22 and 84.23**).
- (2) **Cheese presses** (e.g., of the ~~screw mechanical~~, ~~counterweight pneumatic~~, etc., types) are used, especially in the manufacture of harder cheeses, both to shape the product and to eliminate the superfluous moisture.

Page 1484. Heading 84.36. Part (I). Item (E) (8).

~~(E)(8)~~ **Germination appliances (e.g. "germinators")** **provided** they are fitted with mechanical features (e.g., pumps, motors or fans) or thermal equipment. Simple chests not so equipped are **excluded** (classified according to the constituent material).

Page 1485. Heading 84.36. Part (II).

(II) POULTRY-KEEPING MACHINES, INCUBATORS AND BROODERS

These include :

(A) **Incubators** ~~incorporating thermal equipment, electric or other, for maintaining the eggs (placed in drawers or trays) at a constant temperature, and so hatching them. Some incubators also incorporate devices for turning the eggs automatically.~~ These machines are fitted with devices permitting eggs, placed in trays, to be automatically turned in an atmosphere where temperature, air flow and air humidity conditions can be exactly controlled. They may work in conjunction with a control system which may be linked to a personal computer in order to optimise the incubation result. Some incubators, known as combi incubators, incorporate hatcher functions.

(B) **Hatchers.** In these machines, which incorporate devices for controlled heating and air circulation, the eggs are placed in baskets or special trays for hatching.

~~(C)~~ **Brooders**, larger appliances ~~heated in a similar manner~~ with heating and cooling devices, used for rearing young chicks.

~~(D)~~ **Rearing and laying units or "batteries"**, large installations equipped with automatic devices for filling the feeding troughs, cleaning the floors and collecting the eggs.

~~(E)~~ **Egg candler (or testers)** with mechanical features (including photo-electric testers), **other than** static testing lamps.

Those fitted with a sorting or grading mechanism are **excluded (heading 84.33)**.

~~(E)~~ **Automatic poultry pluckers** (of the rubber finger, disc or comb type, etc.), usually incorporating a bath for boiling water or melted wax to facilitate the removal of the feathers. ~~These poultry pluckers should not be confused with the high output poultry pluckers of heading 84.38.~~

(F) **Sexing and vaccination equipment**, enabling hatcheries to separate chicks of different sex and to vaccinate them. These machines are not designed to be used by veterinary surgeons.

The heading **does not include** machines, known as chick counting and boxing systems, for automatically counting and placing chicks in boxes (**heading 84.28**); the handling of the chicks is the primary function, the counting being merely a secondary function permitting to place in a box a fixed number of chicks, predetermined in accordance with the size of the box.

Page 1495. Heading 84.39. First paragraph.

This heading covers machinery for making fibrous cellulosic pulp from various cellulosic materials (wood, ~~esparto grass~~, straw, ~~rag~~, ~~bagasse~~, ~~old rope~~, waste paper, etc.) whether the pulp is for paper or paperboard making or for other purposes (e.g., for the manufacture of viscose rayon, certain building boards or explosives). It also covers machinery for making paper or paperboard whether from previously prepared pulp (e.g., mechanical or chemical wood pulp), or directly from the raw materials (~~esparto~~, ~~rag~~, straw, bagasse, waste paper, etc.). The heading also covers machines for finishing the paper or paperboard ready for its various uses, **other than** the printing machines of **heading 84.43**.

Pages 1495 to 1496. Part (I). Item (A).

~~(1) Rag cutters.~~

~~(2) Rag dusters~~

~~(3) Rag washers and breakers. In these the rags circulate in water and are beaten by a bladed wheel.~~

(14) Waste paper or paperboard pulping machines.

(25) Openers or dusters for ~~esparto grass~~ straw and similar materials.

(36) Bamboo crushers and special straw cutters for the paper-making industry.

(47) Wood chip cutting machines and vibrating graders for grading the wood chips.

(58) Log grinding machines.

(69) Defibrators for making pulp for "Masonite", ~~defibrators~~ in which wood chips are reduced to fibres by subjection to high pressure followed by a sudden reduction of the pressure.

(7) Refiners for making mechanical pulp and chemi-mechanical pulp, in which wood chips or partly refined chips are reduced to fibres by subjecting the material to mechanical treatment in-between two discs where one or both discs are rotating.

Page 1496. Heading 84.39. Part (I). Items (D) to (E).

~~(D) Machines for beating the fibres with water to form a pulpy mass. These include straw and other pulpers; edge runners (Koller gangs); hollander beaters; potchers; hammer mills, etc. They consist of vats in which the fibres, circulating in water, are ground or beaten into a pulp.~~

~~(DE) Refiners. These are usually of two types: conical and disc refiners. The purpose is to prepare the pulp for papermaking by improving the paper making properties of the pulp. These refiners are driven by motors which are much less powerful than those used for the refiners described under A (7) above. These usually comprise a cone shaped case~~

~~with internal revolving bars which break up any large fibres or lumps and allow the stock that is already sufficiently beaten to pass straight through.~~

Pages 1496 to 1497. Heading 84.39. Part (II). Items (A) to (D).

- (A) **Machines for forming the pulp stock into continuous sheets of paper or paperboard (e.g., Fourdrinier machines or twin wire machines).** These are very complex machines. They consist of regulators for feeding the pulp stock to the breast head box, a slice at the output end of the breast head box for distributing the pulp stock on to the wire, an endless band of fine wire cloth, (usually an alloy of copper, tin, etc.) or a woven fabric of synthetic monofilaments, supported on a breast roll or a forming roll, foils, ~~the~~ table rolls, shake mechanism, suction boxes, dandy rolls for watermarking, couch rolls for ~~partly drying~~ increasing the dry solids content and consolidating the paper, press rolls forming at least one press nip, one press roll may include a press shoe and a surrounding, rotatable belt loop, ~~between in~~ which nip the paper is pressed against one or between two an endless band of felt belts or other process belts, drying rolls, steam boxes, etc., and usually also calender rolls and ~~cutting~~ and reeling devices, etc.
- (B) **Board machines** (normally used for the manufacture of paperboard) and **mould Vat machines.** These are similar in principle to those at (A) but, instead of the pulp flowing out on to an endless band of wire cloth, it is picked up from a vat on a revolving cylinder of wire cloth from which it is transferred to a felt band and then on to press rolls (sometimes of the suction type) and finally to a series of drying cylinders. The paper or paperboard is produced either in the form of continuous strip web or in sheets. In certain of these machines, sheets of paperboard are formed by the layer of pulp winding round and round a cylinder. When a sufficient thickness is built up, it is cut off in the form of sheets, either by hand or mechanically along the length of the cylinder. ~~Machines of this type are also used for the manufacture of asbestos or asbestos-cement boards.~~
- (C) **Machines for the manufacture of multi-layered paper, board or paperboard.** These machines consist of ~~several superimposed devices for forming pulp into sheets or of a battery of board machines, or of machines combining these two types~~ different combinations of Fourdrinier formers or twin wire formers. The different web layers of pulp are produced simultaneously and are joined in a humid state in the machine, ~~as a rule in a humid state~~ without a binder.
- (D) **Small machinery Sample drawing apparatus for making paper samples intended for testing.** These machines are sometimes called "sample drawing machines" for controlling manufacture.

Page 1497. Heading 84.39.

1. Part (III). Items (A) to (I).

- (A) **Reeling machines Winders and rewinders.** Some of these at the same time stretch and smooth the paper and discharge any static electricity.
- (B) **Machines (other than calenders) for applying various kinds of surface coatings, inorganic or organic pigment layers, size, gum, varnish, enamel, metal powder, silicon, wax, etc.;** for coating carbon papers or photographic papers; for coating paper with textile dust, cork or mica powder, etc., for wallpapers.
- (C) **Machines for impregnating paper or paperboard** with oil, plastics, etc., and machines for making bituminised or tarred roofing papers.

~~(D) Flint glazing or hammer glazing machines.~~

~~(DE) Ruling machines~~ working by means of small discs or steel pens fed from an ink bath, but **not** printing machines of **heading 84.43**.

~~(EF) Crêping machines.~~ These normally consist of a metal scraper or doctor which pushes scrapes the paper against from a heated cylinder, so that crinkling of the paper occurs. However, creping usually is carried out in the papermaking machine.

~~(EG) Machines for humidifying paper~~ (also called "paper conditioners") in which the entire surface of the paper or paperboard is exposed to humid air.

~~(GH) Machines for graining and embossing~~ (however, calenders used for the same purpose fall in heading **84.20**).

~~(HJ) Corrugating machines,~~ often may be combined with a laminating device.

2. Exclusion paragraph. Exclusion (a).

(a) Boilers for rags, ~~esparto grass~~, straw, etc.; boilers (digesters) for the preparation of chemical wood pulp; steam heated cylinder and other drying machines (**heading 84.19**).

Page 1498. Heading 84.39. PARTS.

1. Second paragraph.

~~Toothed cylinders for esparto grass openers; b~~Backfalls; bedplates and beater bars for beaters; couch rolls; suction boxes; wire mesh cylinders for ~~mould vat~~ machines; dandy rolls.

2. Exclusion paragraph. Exclusions (a) and (c).

(a) Endless wire belts for Fourdrinier machines and twin wire machines, and fFelt roller covers ~~(and also endless belts of textile material, whether or not felted) of (heading 59.11) or 68.42.~~

~~(c) Unmounted agates for glazing machines (heading 71.03).~~

* * *

OBSERVATIONS OF THE REVIEW SUB-COMMITTEE

Heading 84.34.

Page 1480. Heading 84.34. Part (I). Third paragraph.

Brazil

- Had doubts as to the classification and suggested sending the product to the HSC for a classification decision.

Japan

- Requested additional technical information.

Heading 84.36.

Page 1485. Heading 84.36. New exclusion paragraph.

EC

- Had doubts as to the classification proposed in the new exclusion paragraph (i.e., perhaps heading 84.22 and not heading 84.28 as suggested).
- Agreed with the Secretariat's comments in paragraph 12 of Doc. NR0303E1.

Canada

- Had some general concerns and will attempt to find further information.

Heading 84.39.

Page 1497. Heading 84.39. Part (III). Item (A).

Canada

- Did not share the Secretariat's concerns regarding "reeling machines". Will study the issue and provide a written submission, if necessary.
